

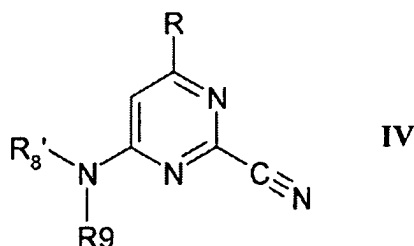
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-10. (Cancelled).

11. (New) A compound of formula IV, or a pharmaceutically acceptable salt thereof



in which

R is H, -R₂, -OR₂ or NR₁R₂,

wherein R₁ is H, lower alkyl or C₃ to C₁₀ cycloalkyl, and

R₂ is lower alkyl or C₃ to C₁₀ cycloalkyl, and

wherein R₁ and R₂ are independently, optionally substituted by halo, hydroxy, lower alkoxy, CN, NO₂, or optionally mono- or di-lower alkyl substituted amino;

R₈' is optionally substituted aryl-lower alkyl

wherein R₈' is optionally substituted by R₁₀ which represents from 1 to 4 substituents selected from halo, hydroxy, CN, NO₂, -O-C(O)-, optionally substituted (lower-alkyl, C₃-C₁₀cycloalkyl, lower-alkoxy, lower-alkenyl, lower-alkynyl, optionally mono- or di-lower alkyl-substituted amino or N-heterocyclyl), where N-heterocyclyl denotes a saturated, partially unsaturated or aromatic nitrogen containing heterocyclic moiety attached via a nitrogen atom thereof having from 3 to 8 ring atoms optionally containing a further 1, 2 or 3 heteroatoms selected from N, NR₆, O, S, S(O) or S(O)₂ wherein R₆ is H or optionally substituted (lower alkyl, carboxy, formyl, acetyl, propionyl, benzoyl, amido, aryl, S(O) or S(O)₂), and wherein the N-heterocyclyl is optionally fused in a bicyclic structure with a benzene or pyridine ring, and wherein the N-heterocyclyl is optionally linked in a spiro structure with a 3 to 8 membered cycloalkyl or heterocyclic ring wherein the heterocyclic ring has from 3 to 10 ring members and contains from 1 to 3 heteroatoms selected from N, NR₆, O, S, S(O) or S(O)₂ wherein R₆ is as defined above;

wherein R10 is optionally substituted by R11 which represents from 1 to 4 substituents selected from halo, hydroxy, CN, NO₂, oxo, optionally substituted (optionally mono- or di-lower alkyl-substituted amino, lower alkyl, optionally-lower alkyl substituted COOH, sulphonyl, sulphonyl, or N-heterocyclyl which is as defined above;

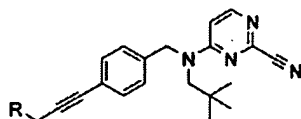
wherein R11 is optionally substituted by R12 which represents from 1 to 4 substituents selected from halo, hydroxy, CN, NO₂, oxo, hydroxy lower alkyl, C₃-C₁₀cycloalkyl, optionally lower alkyl-substituted carboxy, hydroximine, or N-heterocyclyl as defined above,

and wherein

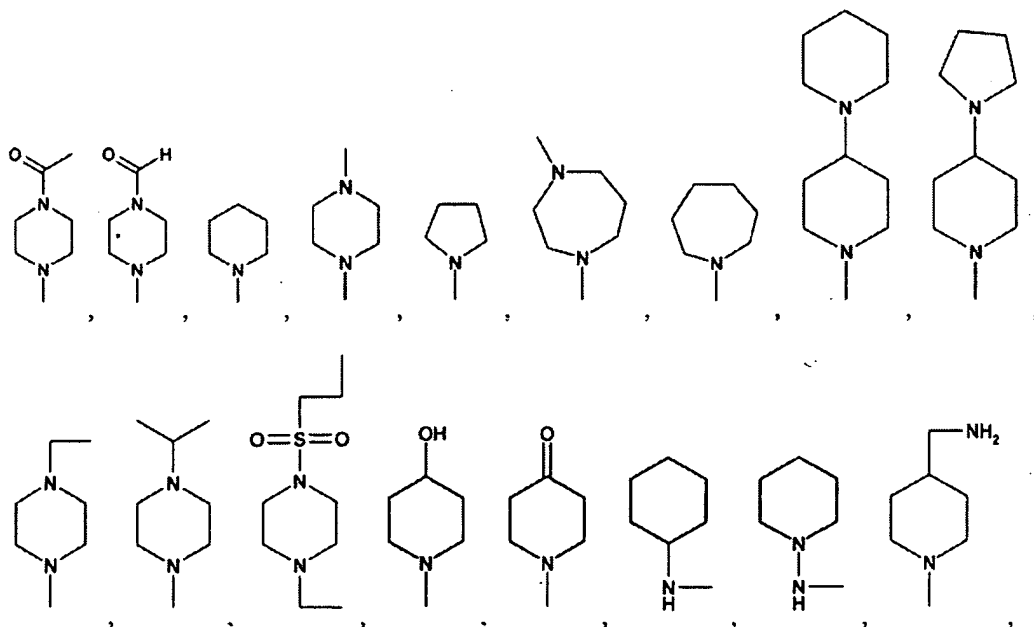
R9 is H or optionally substituted lower alkyl, and

wherein R9 is optionally substituted by halo, hydroxy, oxo, lower alkoxy, CN, NO₂, or optionally mono- or di-lower alkyl substituted amino;

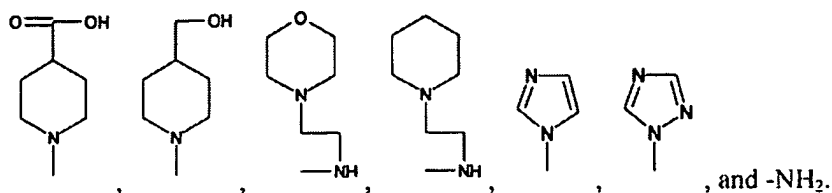
12. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



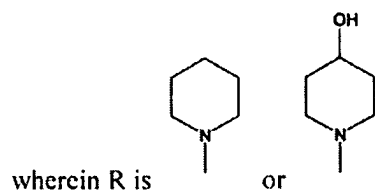
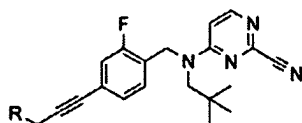
wherein R is selected from the group consisting of:



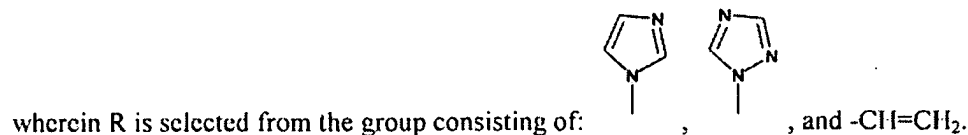
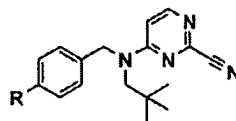
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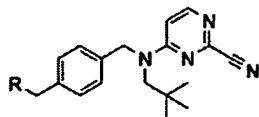
13. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



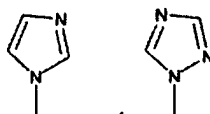
14. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



15. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:

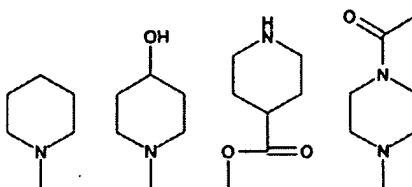
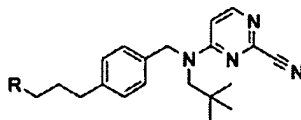


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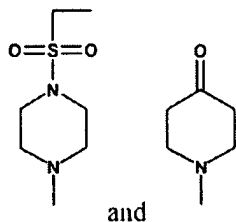


wherein R is selected from the group consisting of:

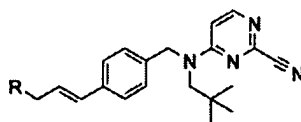
16. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



wherein R is selected from the group consisting of:

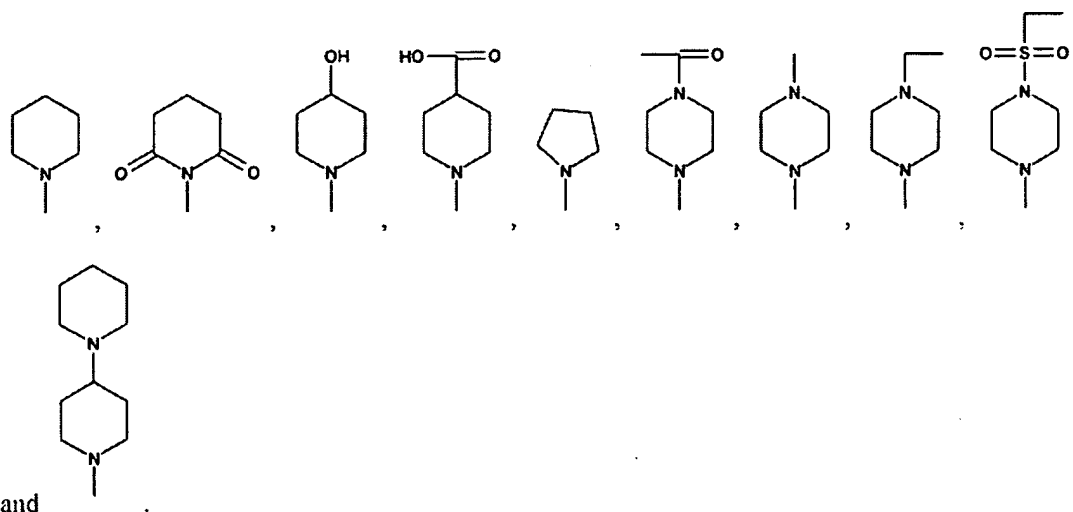


17. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:

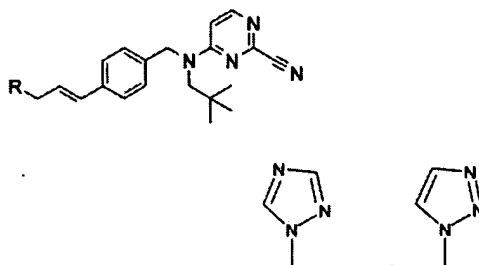


wherein R is selected from the group consisting of:

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18. (New) The compound according to claim 11, or a pharmaceutically acceptable salt thereof, wherein the compound is selected from compounds of formula:



wherein R is selected from the group consisting of: -CN, , and .

19. (New) The compound according to claim 11, which is selected from the group consisting of 4-[(2,2-dimethyl-propyl)-(4-[1,2,4]triazol-1-yl-benzyl)-amino]-pyrimidine-2-carbonitrile, 4-[(2,2-dimethyl-propyl)-(4-(3-methyl-3*H*-imidazol-4-yl)-benzyl)-amino]-pyrimidine-2-carbonitrile, 4-[(2,2-dimethyl-propyl)-(4-oxazol-2-yl-benzyl)-amino]-pyrimidine-2-carbonitrile, 4-[(2,2-dimethyl-propyl)-(4-[1,2,4]triazol-1-ylmethyl-benzyl)-amino]-pyrimidine-2-carbonitrile, 4-[(2,2-dimethyl-propyl)-(4-ethyl-benzyl)-amino]-pyrimidine-2-carbonitrile, 4-[(2,2-dimethyl-propyl)-(4-[3-(4-hydroxyimino-piperidin-1-yl)-prop-1-ynyl]-benzyl)-amino]-pyrimidine-2-carbonitrile, and methanesulfonic acid 2-(4-[(2-cyano-pyrimidin-4-yl)-(2,2-dimethyl-propyl)-amino]-methyl)-phenyl)-propyl ester.

20. A pharmaceutical composition comprising a compound according to claim 11 as an active ingredient and a pharmaceutically acceptable carrier material.

21. A method of treating a patient suffering from or susceptible to a disease or medical condition in which cathepsin K is implicated selected from the group consisting of osteoarthritis, rheumatoid arthritis and osteoporosis, comprising administering a compound according to claim 1, or a pharmaceutically acceptable salt thereof, to the patient.